Article 34

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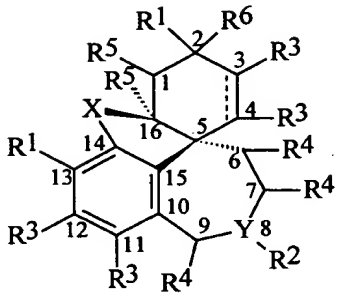
CLAIMS

1. The use of galantamine or a derivative thereof of formula I:



wherein the broken line represents an optionally present double bond between carbon atoms 3 and 4, each R_1 is independently selected from hydrogen, hydroxyl, straight or branched chain alkyl, hydroxyalkyl, carboxyalkyl amino, alkylamino, acyl, lower alkanoyl, cyano, sulfhydryl, C_{1-6}alkoxy, alkylthio, aryloxy, arylthio, R_3-substituted aryloxy, R_3-substituted arylthio, aralkoxy, an optionally R_3-substituted aliphatic or aryl carbamyl group, aralkylthio, R_3-substituted aralkoxy, R_3-substituted aralkylthio, aryloxymethyl, R_3-substituted aryloxymethyl, alkanoyloxy, hydroxy-substituted alkanoyloxy, benzoyloxy, R_3-substituted benzoyloxy, aryloxycarbonyl and R_3-substituted aryloxycarbonyl,

R_2 is selected from hydrogen, straight or branched chain C_{1-6}alkyl, alkenyl or alkaryl group, optionally substituted by a halogen atom or a cycloalkyl, hydroxy, alkoxy, nitro, amino, aminoalkyl, acylamino, heteroaryl, heteroaryl-alkyl, aryl, arylalkyl, cyano, amyl, aroyl, cycloalkylmethyl, allyl, phenyl, R_3-substituted phenyl, alkylphenyl, R_3-substituted alkylphenyl, heterocyclyl

selected from α- or β-furyl, α- or β-thienyl, thenyl, pyridyl, pyrazinyl, and pyrimidyl, alkyl-heterocyclyl or R'-substituted heterocyclyl, where R' is alkyl or alkoxy,

each R_3 is independently selected from hydrogen, hydroxyl, sulfhydryl, alkyl, hydroxyalkyl, aryl, aralkyl, alkoxy, mercaptoalkyl, aryloxy, thiaryloxy, alkaryloxy, mercaptoalkaryl, nitro, amino, N-alkylamino, N-arylamino, N-alkarylamino, fluoro, chloro, bromo, iodo, and trifluoromethyl,

each R_4 is independently selected from hydrogen, halo, trifluoromethyl or C_{1-4}-alkyl,

each R_5 is independently selected from hydrogen or hydroxymethyl,

R_6 is hydrogen or C_{1-6}alkyl, or when R_1 at carbon atom 2 is hydroxyl, R_6 may be a moiety of formula I wherein R_6 is hydrogen and R_1 is a linking bond; or

R_1 at carbon atom 2 and R_6 may jointly form semicarbazone,

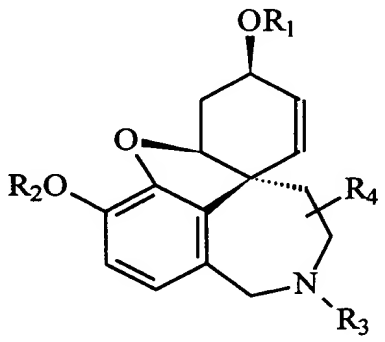
X is oxygen or NR_3,

Y is nitrogen or phosphorus,

and methylenedioxy derivatives thereof and pharmaceutically acceptable acid addition salts thereof

in the manufacture of a medicament for combatting attention deficit disorders.

2. The use of galantamine or a derivative thereof of formula II



II

wherein R^1 and R^2 which may be the same or different each represents a hydrogen atom or an acyl group, such as a lower alkanoyl group, e.g. an acetyl group or a straight-chained or branched alkyl group, e.g. methyl, ethyl, propyl, or isopropyl;

R^3 is a straight or branched chain alkyl, alkenyl or alkaryl group which is optionally substituted by a halogen atom or a cycloalkyl, hydroxy, alkoxy, nitro, amino, aminoalkyl, acylamino, heteroaryl, heteroarylalkyl, aroyl, aroylalkyl or cyano group; and

R^4 represents a hydrogen or a halogen atom attached to at least one of the ring carbons of the tetracyclic skeleton,

and pharmaceutically acceptable salts thereof, such as a hydrobromide, hydrochloride, methylsulphate or methiodide in the manufacture of a medicament for combatting attention deficit disorders.

3. The use of galantamine or a salt thereof in the manufacture of a medicament for combatting attention deficit disorders.

4. The use is claimed in any one of claims 1 to 3 wherein the disorder is attention deficit hyperactivity disorder.

5. The use as claimed in any one of claims 1 to 3 wherein the disorder is a hyperkinetic disorder.

6. A method of combatting attention deficit disorders comprising administering galantamine or a salt or derivative thereof as defined in claim 1 or claim 2.

7. A method as claimed in claim 6 wherein the disorder is as defined in claim 4 or claim 5.